

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:  
Richard BODIN et al.

Serial No.: 10/630,999

Filed: July 30, 2003

For: PROVIDING PACKET-BASED  
MULTIMEDIA SERVICES VIA A  
CIRCUIT BEARER

§ Attorney Docket No.: 16048ROUS01U / 22171.353

§  
§ Customer No. 27683

§  
§ Group Art Unit: 2416

§  
§ Examiner: Mattis, Jason E.

§ Confirmation No.: 7723  
§

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Alexandria, VA 22313-1450

Sir:

**APPEAL BRIEF**

A timely Notice of Appeal was previously filed on March 25, 2009, in order to initiate an appeal from the action of the Primary Examiner in finally rejecting pending Claims 1, 3-9, and 12-20 in an Office Action mailed on January 28, 2009. This Appeal Brief is being filed pursuant to the provisions of 37 C.F.R. §41.37, including the fee of \$540 under 37 C.F.R. §41.37(a)(2) and §41.20(b)(2) for filing this Appeal Brief.

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**REAL PARTY IN INTEREST**

The real party in interest is NORTEL NETWORKS LIMITED, a Canadian company having a principle place of business at 2351 Boulevard Alfred-Nobel, St. Laurent, Quebec H4S 2A9, Canada.

**RELATED APPEALS AND INTERFERENCES**

There are no prior or pending appeals, interferences or judicial proceedings known to appellant, appellant's legal representative, or the assignee that may be related to, directly affect, be directly affected by or have a bearing on the Board's decision in the present appeal.

### **STATUS OF CLAIMS**

Claims 1-20 are pending, of which, Claims 1, 3-9, and 12-20 have been finally rejected, and are on appeal here. Dependent Claims 2, 10, and 11 have been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form.

**STATUS OF AMENDMENTS**

No amendment has been filed since mailing of the final rejection on January 28, 2009.

### **SUMMARY OF CLAIMED SUBJECT MATTER**

To clarify the summary of the claimed subject matter, at least some representative portions of the specification and drawings related to the recited claim elements are set forth parenthetically below. However, there may be further portions of the specification and/or drawings that are also relevant to the claimed subject matter.

The subject matter recited in independent Claim 1 of the present application relates to a method (Fig. 1, reference no. 100; paragraph [0016]) of providing a packet-based multimedia service to a mobile device (Fig. 2, reference no. 236) in a network (Fig. 2, reference no. 200), wherein the service is defined by a telecommunication standard (e.g., 3GPP IMS Standard; paragraph [0024]), and wherein the network does not support packet quality of service (QoS) functionality (paragraphs [0019 and 24]) as required by the standard, the method comprising:

- establishing a packet signaling connection between the mobile device and network (Fig. 1, reference no. 102; paragraph [0018]);

- establishing a circuit bearer connection between the mobile device and network (Fig. 1, reference no. 104; paragraph [0018]);

- transferring signaling information for the multimedia service via the packet signaling connection in alignment with the standard (Fig. 1, reference no. 108; paragraph [0019]); and

- transferring data for the multimedia service via the circuit bearer connection in alignment with the standard (Fig. 1, reference no. 110; paragraph [0019]), wherein the multimedia service is provided to the mobile device via the network as specified by the standard even though the network does not support the required QoS functionality (paragraphs [0019 and 24]).

The subject matter recited in independent Claim 8 of the present application relates to a method (Fig. 1, reference no. 100; paragraph [0016]) for providing a packet-based multimedia service to an endpoint in a wireless network (Fig. 2, reference no. 200), wherein the service is

defined by a telecommunications standard (e.g., 3GPP IMS Standard; paragraph [0024]), and wherein the network does not support a packet quality of service (QoS) mechanism (paragraphs [0019 and 24]) specified by the standard, the method comprising:

- establishing a packet-based signaling context (paragraph [0027]) between the endpoint (Fig. 3, reference no. 306) and a gateway (Fig. 3, reference no. 318);

- establishing a circuit bearer leg (Fig. 3, reference no. 320; Fig. 4) between the endpoint and the gateway using the signaling context (paragraphs [0027 through 33]); and

- controlling the transfer of data via the circuit bearer leg using the signaling context, wherein the signaling context is used to control the provision of the packet-based multimedia service via the circuit bearer leg in alignment with the standard (paragraph [0026]).

The subject matter recited in independent Claim 15 of the present application relates to a telecommunications system for providing a packet-based multimedia service to a mobile station (MS) (Fig. 2, reference no. 236) in a wireless network (Fig. 2, reference no. 200), wherein the service is defined by a telecommunications standard (e.g., 3GPP IMS Standard; paragraph [0024]), and wherein the network does not support a packet quality of service (QoS) mechanism (paragraphs [0019 and 24]) specified by the standard, the system comprising:

- a proxy call session control function (P-CSCF) (Fig. 3, reference no. 314; paragraph [0025]);

- a media gateway (Fig. 3, reference no. 318; paragraph [0026]) connected to the P-CSCF; and

- a plurality of instructions for executing within the network, the instructions for:

- establishing a packet signaling connection (Fig. 3, reference no. 302; paragraph [0027] between the MS (Fig. 3, reference no. 306) and the P-CSCF;

- establishing a circuit bearer connection (Fig. 3, reference no. 320; paragraph [0027]) between the MS and the media gateway (Fig. 3, reference no. 318);



transferring signaling information for the multimedia service between the P-CSCF and the media gateway, and between the P-CSCF and the MS via the packet signaling connection in alignment with the standard (paragraph [0026 and 33]); and

transferring data for the multimedia service between the media gateway and the MS via the circuit bearer connection in response to the signaling information (paragraph [0026]).

**GROUND OF REJECTION TO BE REVIEWED ON APPEAL**

1. Whether Claims 1, 3-9, 12-16, and 19 are unpatentable under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 6,608,832 to Forslow (hereinafter referred to as "Forslow").

2. Whether Claims 17, 18, and 20 are unpatentable under 35 U.S.C. §103(a) as being obvious over Forslow in view of U.S. Patent Application Publication 2002/0110104 A1 to Surdila et al. (hereinafter referred to as "Surdila").

## **ARGUMENT**

### **I. THE §102 REJECTIONS OF CLAIMS 1, 3-9, 12-16, and 19**

Claims 1, 3-9, 12-16, and 19 stand rejected under 35 U.S.C. §102(e) as being anticipated by Forslow. However, it is respectfully submitted that Claims 1, 3-9, 12-16, and 19 are not anticipated by Forslow. In this regard, the PTO provides in MPEP § 2131 that:

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). ... “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).  
(emphasis added)

Therefore, to sustain the §102(e) rejection, Forslow must disclose each and every element in as complete detail as is contained in the pending claims.

#### **A. Claims 15, 16, and 19**

Claims 16 and 19 depend from and further limit independent Claim 15. The following discussion focuses on independent Claim 15.

Applicants' Claim 15 includes a recitation of:

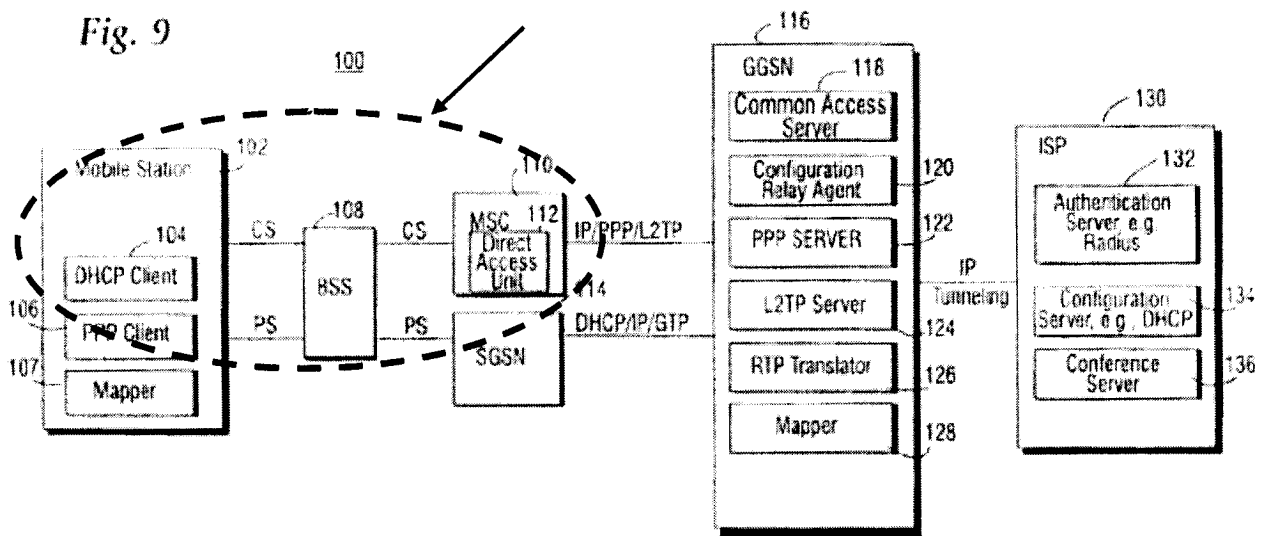
A telecommunications system for providing a packet-based multimedia service to a mobile station (MS) in a wireless network, wherein the service is defined by a telecommunications standard, and wherein the network does not support a packet quality of service (QoS) mechanism specified by the standard, the system comprising:

a proxy call session control function (P-CSCF);  
a media gateway connected to the P-CSCF; and  
a plurality of instructions for executing within the network,  
the instructions for:  
    establishing a packet signaling connection between  
    the MS and the P-CSCF;  
    establishing a circuit bearer connection between the  
    MS and the media gateway;  
    transferring signaling information for the  
    multimedia service between the P-CSCF and the media  
    gateway, and between the P-CSCF and the MS via the  
    packet signaling connection in alignment with the standard;  
    and  
    transferring data for the multimedia service between  
    the media gateway and the MS via the circuit bearer  
    connection in response to the signaling information.

Applicants respectfully submit that Forslow does not disclose a telecommunication system for providing a packet-based multimedia service to a mobile station (MS) in a wireless network that includes instructions for “transferring signaling information for the multimedia service between the P-CSCF and the media gateway, and between the P-CSCF and the MS via the packet signaling connection in alignment with the standard.”

The Office Action indicated that Forslow’s Base Station Controller (BSC) allegedly functions as the claimed Proxy Call Session Control Function (P-CSCF) and Forslow’s Mobile Switching Center (MSC) allegedly functions as the claimed media gateway. (Final Office Action mailed January 28, 2009, pgs. 7-8). Claim 15 recites that the signaling information for the multimedia service is transferred between the P-CSCF and the media gateway, and between the

P-CSCF and the MS via the packet signaling connection in alignment with the standard. If the assertions in the Office action were so in Forslow, the signaling information for the multimedia service would be transferred between the BSC and the MSC, and between the BSC and the MS via the packet signaling connection in alignment with the standard. However, this does not make sense since the path as alleged in the Office Action (MS — BSC — MSC) is a circuit-switched (CS) bearer path as clearly shown below in Fig. 9 of Forslow. It is noted that the BSS 108 in Fig. 9 denotes a base station subsystem (BSS) which includes a base station controller (BSC). (See Forslow, Col. 14, lines 35-37).



From the above, it is clear that the Forslow reference does not teach each and every element of Claim 15. Accordingly, it is respectfully submitted that independent Claim 15 is not anticipated under 35 U.S.C. §102(e) by Forslow.

Claims 16 and 19 depend from and further limit Claim 15, and are believed to be allowable for at least the same reasons as Claim 15.

**B. Claims 1 and 3-7**

Claims 3-7 depend from and further limit independent Claim 1. The following discussion focuses on independent Claim 1.

Applicants' Claim 1 includes a recitation of:

A method for providing a packet-based multimedia service to a mobile device in a network, wherein the service is defined by a telecommunications standard, and wherein the network does not support packet quality of service (QoS) functionality as required by the standard, the method comprising:

establishing a packet signaling connection between the mobile device and network;

establishing a circuit bearer connection between the mobile device and network;

transferring signaling information for the multimedia service via the packet signaling connection in alignment with the standard; and

transferring data for the multimedia service via the circuit bearer connection in alignment with the standard, wherein the multimedia service is provided to the mobile device via the network as specified by the standard even though the network does not support the required QoS functionality.

Applicants respectfully submit that Forslow does not disclose a method that includes the features of “transferring signaling information for the multimedia service via the packet signaling connection in alignment with the standard” and “transferring data for the multimedia service via the circuit bearer connection in alignment with the standard, wherein the multimedia service is

provided to the mobile device via the network as specified by the standard even though the network does not support the required QoS functionality.”

More specifically, the Office Action indicated that Forslow discloses transferring signaling information for the multimedia service via the packet signaling connection in alignment with the standard in “column 6 lines 34-47, column 10 lines 18-39, column 11 line 56 to column 12 line 10, and Figure 7.” (Final Office Action mailed January 28, 2009, pg. 3). Additionally, the Office Action indicated that Forslow discloses transferring data for the multimedia service via the circuit bearer connection in alignment with the standard wherein the multimedia service is provided to the mobile device via the network as specified by the standard even though the network does not support QoS functionality in “column 6, lines 34-47, column 10 lines 18-39, column 11 lines 29-42, column 11 line 56 to column 12 line 10, and Figure 7.” (Final Office Action mailed January 28, 2009, pg. 3). Applicants respectfully disagree.

The cited passages of Forslow specify:

In any bearer allocation approach, it is preferred (but not required) that a packet-switched bearer be employed to carry control information being bursty and brief by nature and because of fast set up and take down times afforded by packet-switched bearers. On the other hand, if a circuit-switched to a mobile station already exists for an application flow, packet-switched type information may be transferred over the existing circuit-switched bearer (because it is existing) even if that information is more suitable for transfer over a packet switched type bearer. This approach is used, for example, with mobile stations that cannot terminate simultaneous circuit-switched and packet-switched traffic, e.g., so called class B GPRS mobile stations. (Col. 6, lines 34-47) (emphasis added)

The cited passages of Forslow also specify:

In general, a typical application having a plural application flows requiring communication between a mobile station and an external network entity like an ISP may follow the following example procedures:

- (1) The mobile station registers using a common access procedure for both circuit-switched and packet-switched bearer communication at the ISP using “low cost” packet-switched bearer and full dynamic host configuration support. Thereafter, only an abbreviated authentication and configuration procedure is required for subsequent absolute application flows as is described in more detail below.
- (2) The packet-switched bearer service with a predictive quality of service delay class is used to transport application control messages.
- (3) The packet-switched bearer service is employed to transfer bulk data with a best effort quality of service delay class.
- (4) A low delay quality of service provided by the circuit-switched bearer services is employed to transport audio or video components. (Col. 10, lines 18-39).

The cited passages of Forslow further specify:

Fig. 7 is a diagram which depicts a particular mobile application that includes three example application flows including a video application flow, an audio application flow, a conferencing



application flow along with a system control operations flow (a total of four application flows). Each flow has a quality of service associated with it recognized on the IP layer. At the transport layer, each application flow uses different coding and messaging protocols as appropriate. The video and audio application flows typically are processed through coders, e.g., H.263/H.261 for video or GSM 06.10 for audio, and are then encapsulated into the real-time transfer protocol (RTP) for delay-sensitive transport end-to-end. Application flows including control data for application sessions like conference sessions do not require codecs but instead use real-time session control (RTSP), session invitation (SIP), and session announcement (SAP) protocols. These protocols are further encapsulated into UDP or TCP to build a total transport layer. The last “application flow” relates to the system control and relies on transport protocols that handle resource reservation of the other flows, e.g., RSVP, and the dynamic configuration of the mobile station, e.g., DHCP. (Col. 11, line 56 to Col. 12, line 10) (emphasis added).

As should be evident from the highlighted sections above, Forslow describes the types of information that are suitable for transfer over a circuit-switched bearer and packet-switched bearer, and an approach that selects a particular bearer path based on quality of service requirements of the information to be transferred. For example, Forslow specifies that “[i]n the present invention an optimal type of mobile communication network transfer service—a circuit-switched transfer service or a packet-switched transfer—is specified on an individual application flow basis.” (Forslow, Col. 5, lines 41-45) (emphasis added). Each individual application flow may have a quality of service request (e.g., predictive quality of service, best effort quality of

service, or low delay quality of service). Accordingly, the Forslow reference provides a mechanism that selects either a circuit-switched bearer or a packet-switched bearer that is best suited to transfer the individual application flow in accordance with its quality of service requirements. (See Forslow, Col. 5, line 66 to Col. 6, line 15). As clearly shown below in Fig. 7 of Forslow, “the present invention provides a bearer selection and quality of service parameter mapping layer which selects for each application flow at the IP layer the best suited one of a circuit-switched bearer and a packet-switched bearer.” (Forslow, Col. 12, lines 14-18) (emphasis added). Thus, Forslow teaches, as examples, using a circuit-switched bearer for audio or video components that are processed through coders (e.g., codecs) or using a packet-switched bearer for control data of a conference session that employs session-based protocols (e.g., RTSP, SIP, and SAP). As such, each application flow uses different coding and messaging protocols as appropriate at the transport layer.

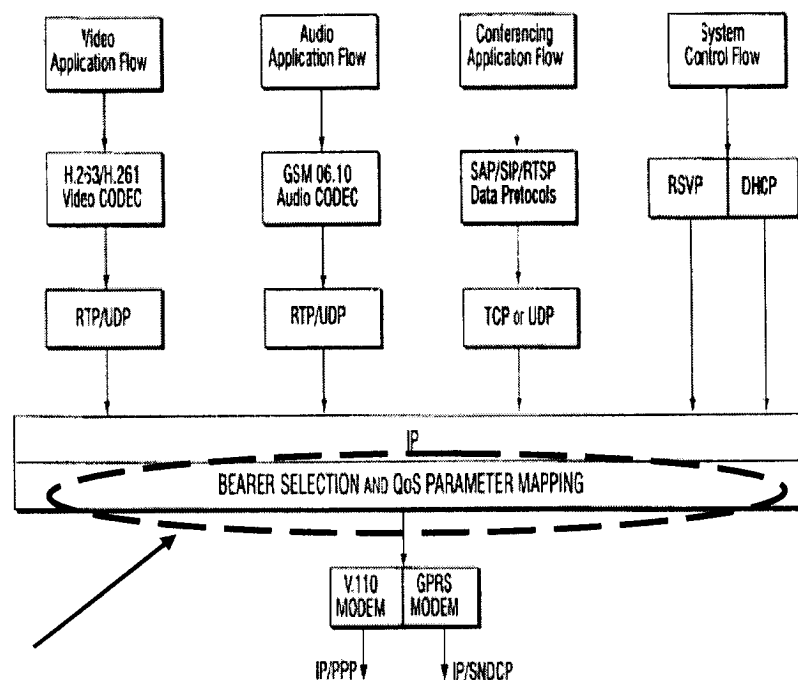


Fig. 7

However, nowhere in the cited passage of Forslow does it disclose that data for the multimedia service is transferred via the circuit bearer connection in alignment with the standard, wherein the multimedia service is provided to the mobile device via the network as specified by the standard even though the network does not support the required QoS functionality.

Here, Claim 1 recites that the signaling information for the multimedia service is transferred via the packet signaling connection in alignment with the standard and the data for the multimedia service is transferred via the circuit bearer connection in alignment with the standard. Thus, the claimed method enables the multimedia service to be provided to a mobile station via the network as specified by the standard even though the network does not support the required quality of service (QoS) functionality.

It is clear that the Forslow reference does not teach each and every element of Claim 1. Accordingly, it is respectfully submitted that independent Claim 1 is not anticipated under 35 U.S.C. §102(e) by Forslow.

Claims 3-7 depend from and further limit Claim 1, and are believed to be allowable for at least the same reasons as Claim 1.

### **C. Claims 8-9 and 12-14**

Claims 9 and 12-14 depend from and further limit independent Claim 8. The following discussion focuses on independent Claim 8.

Applicants' Claim 8 includes a recitation of:

A method for providing a packet-based multimedia service to an endpoint in a wireless network, wherein the service is defined by a telecommunications standard, and wherein the network does not support a packet quality of service (QoS) mechanism specified by the standard, the method comprising:

establishing a packet-based signaling context between the endpoint and a gateway;

establishing a circuit bearer leg between the endpoint and  
the gateway using the signaling context; and  
controlling the transfer of data via the circuit bearer leg  
using the signaling context, wherein the signaling context is used  
to control the provision of the packet-based multimedia service via  
the circuit bearer leg in alignment with the standard.

Applicants respectfully submit that Forslow does not anticipate Claim 8 for at same reasons set forth above in connection with Claim 1. Additionally, it is respectfully submitted that Forslow does not disclose the feature of “controlling the transfer of data via the circuit bearer leg using the signaling context , wherein the signaling context is used to control the provisions of the packet-based multimedia service via the circuit bearer leg in alignment with the standard.” The Office Action points to the same passages of Forslow (see column 6 lines 34-47, column 10 lines 18-39, column 11 lines 29-42, column 11 line 56 to column 12 line 10, and Figure 7) that were used to reject Claim 1, and alleges that Forslow discloses “controlling transfer of audio and video data of applications through the circuit-switched bearer service via the packet-switched bearer service to provide the application to the mobile station in alignment with the application standard.” (Final Office Action mailed January 28, 2009, pg. 6).

As discussed above, Forslow provides a mechanism that selects either a circuit-switched bearer or a packet-switched bearer that is best suited to transfer an application flow in accordance with its quality of service requirements. In the cited passages, Forslow discloses an application flow including control data for a conference session that is transferred using session-based protocols such as RTSP, SIP, and SAP, and an application flow including system control information that is transferred using transport protocols such as RSVP and DHCP. (See Forslow, Col. 11, line 56 to Col. 12, line 10).

However, the cited passages of Forslow are wholly silent as to using the signaling context to control the transfer of data for the provisions of the packet-based multimedia service via the

circuit bearer leg in alignment with the standard, as is recited in Claim 8.

Therefore, it is clear that the Forslow reference does not teach each and every element of Claim 8. Accordingly, it is respectfully submitted that independent Claim 8 is not anticipated under 35 U.S.C. §102(e) by Forslow.

Claims 9 and 12-14 depend from and further limit Claim 8, and are believed to be allowable for at least the same reasons as Claim 8.

#### **D. Request For Relief**

For each of the various different reasons discussed above, it is respectfully submitted that independent Claims 1, 8, and 15 are not anticipated under §102(e) by Forslow. It is therefore respectfully requested that the Board reverse the §102(e) rejection of Claims 1, 8, and 15.

Claims 3-7 depend from and further limit Claim 1, and are believed to be allowable for at least the same reasons as Claim 1.

Claims 9 and 12-14 depend from and further limit Claim 8, and are believed to be allowable for at least the same reasons as Claim 8.

Claims 16 and 19 depend from and further limit Claim 15, and are believed to be allowable for at least the same reasons as Claim 15.

## **II. THE §103 REJECTIONS OF CLAIMS 17, 18, and 20**

Claims 17, 18, and 20 stand rejected under 35 U.S.C. §103(a) as being obvious over Forslow in view of Surdila. However, it is respectfully submitted that Claims 17, 18, and 20 are not obvious over Forslow in view of Surdila. In this regard, the PTO recognizes in MPEP §2142 that:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not

produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

Applicants respectfully submit that Forslow and Surdila fail to establish a *prima facie* case of obviousness under §103 with respect to independent Claim 15, from which Claims 17, 18, and 20 depend, for reasons that are discussed below.

**A. The PTO Must Consider All Words in the Claim Under §103**

As discussed in MPEP §2142, case law relating to §103 requires that:

To establish a *prima facie* case of obviousness . . . the prior art reference (or references when combined) must teach or suggest **all** the claim limitations. . . . *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

MPEP 2143.03 states that “[a]ll words in a claim must be considered in judging the patentability of that claim against the prior art.” Quoting *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). However, in the present matter, the Forslow reference fails to teach all the limitations of independent Claim 15 as was discussed above. Accordingly, even incorporating the teachings of Surdila, the proposed combination of Forslow and Surdila fails to teach or suggest all the limitations of Claim 15.

Therefore, for this reason alone, the Examiner’s burden of factually supporting a *prima facie* case of obviousness has clearly not been met, and it is respectfully submitted that Claim 15, from which Claims 17, 18, and 20 depend, is not obvious over Forslow in view of Surdila.

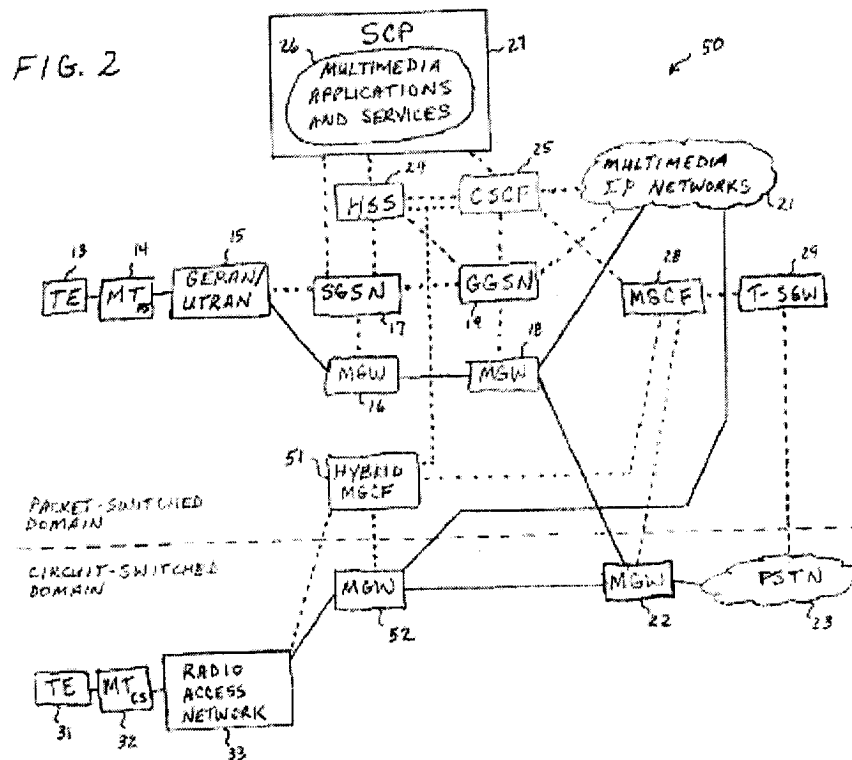
**B. The PTO Cannot Establish Obviousness With Art That Teaches Away**

In evaluating obviousness, it is not proper to selectively consider only part of a reference,

while ignoring other parts that teach away from the invention. More specifically, as discussed in MPEP §2141.02, case law has established that:

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). (Emphasis in original).

In the present case, the Surdila reference discloses only mobile stations capable of one of a packet-switched operation or a circuit-switched operation. Thus, Surdila is directed to a system in which the establishment of both a packet signaling connection and a circuit-switched bearer connection with a common mobile station is neither described nor suggested. For example, Figure 2 of Surdila is as follows:



As is clearly depicted above in FIG. 2 of Surdila, mobile terminals operating in the system of Surdila operate in either a packet-switched mode (e.g., mobile terminal 14) or in a circuit-switched mode (e.g., mobile terminal 32). Thus, the system of Surdila clearly teaches away from Claim 15, recited above, in which both a circuit-switched and packet-switched connection are established with a common mobile station.

Since it is well recognized that teaching away from the claimed invention is a *per se* demonstration of lack of *prima facie* obviousness, it is clear that the Examiner has not borne the initial burden of factually supporting any *prima facie* conclusion of obviousness.

Thus, for this reason alone, the Examiner's burden of factually supporting a *prima facie* case of obviousness has clearly not been met, and it is respectfully submitted that Claim 15, from which Claims 17, 18, and 20 depend, is not obvious over Forslow in view of Surdila.



**C. Request For Relief**

For each of the various different reasons discussed above, it is respectfully submitted that Claims 17, 18, and 20 are not rendered obvious under §103(a) by the proposed combination of Forslow and Surdila. It is therefore respectfully requested that the Board reverse the §103(a) rejection of Claims 17, 18, and 20.

### **III. CONCLUSION**

For reasons discussed above, it is respectfully submitted that the rejections of each of pending Claims 1, 3-9, and 12-20 are erroneous. Accordingly, it is respectfully requested that the Board reverse the claim rejections discussed in the foregoing arguments. Additionally, it is respectfully submitted that dependent Claims 2, 10, and 12, which have been objected to, are allowable for the reasons set forth above in connection with their respective independent claim.

Respectfully submitted,



Liem T. Do  
Registration No. 59,804

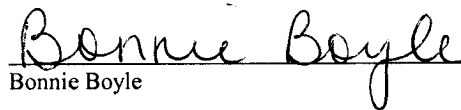
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Enclosures: Claims Appendix  
Evidence Appendix  
Related Proceedings Appendix

#### **Certificate of Service**

I hereby certify that this correspondence is being filed with the U.S. Patent and Trademark Office via EFS-Web on June 23, 2009.

  
Bonnie Boyle

### **CLAIMS APPENDIX**

1. A method for providing a packet-based multimedia service to a mobile device in a network, wherein the service is defined by a telecommunications standard, and wherein the network does not support packet quality of service (QoS) functionality as required by the standard, the method comprising:

establishing a packet signaling connection between the mobile device and network;  
establishing a circuit bearer connection between the mobile device and network;  
transferring signaling information for the multimedia service via the packet signaling connection in alignment with the standard; and  
transferring data for the multimedia service via the circuit bearer connection in alignment with the standard, wherein the multimedia service is provided to the mobile device via the network as specified by the standard even though the network does not support the required QoS functionality.

2. The method of claim 1 further comprising executing at least one null operation to authorize QoS resources, wherein the operation is null because no QoS is requested due to the circuit bearer connection.

3. The method of claim 1 further comprising controlling the transfer of data via the circuit bearer connection using the signaling information.

4. The method of claim 1 further comprising requesting the circuit bearer connection, wherein the request is initiated by the network.

5. The method of claim 1 further comprising requesting the circuit bearer connection, wherein the request is initiated by the mobile device.

6. The method of claim 1 further comprising maintaining the circuit bearer and packet signaling connections simultaneously.

7. The method of claim 1 further comprising bridging the circuit bearer connection with an endpoint bearer connection, wherein the bridging establishes a link between the mobile device and the endpoint bearer connection.

8. A method for providing a packet-based multimedia service to an endpoint in a wireless network, wherein the service is defined by a telecommunications standard, and wherein the network does not support a packet quality of service (QoS) mechanism specified by the standard, the method comprising:

establishing a packet-based signaling context between the endpoint and a gateway;  
establishing a circuit bearer leg between the endpoint and the gateway using the signaling context; and

controlling the transfer of data via the circuit bearer leg using the signaling context, wherein the signaling context is used to control the provision of the packet-based multimedia service via the circuit bearer leg in alignment with the standard.

9. The method of claim 8 further comprising initiating the establishment of the circuit bearer leg by either the endpoint or the gateway.

10. The method of claim 8 further comprising authorizing a previously requested QoS resource, wherein the authorization is null because no QoS is requested due to the circuit bearer connection.

11. The method of claim 10 wherein the authorizing utilizes a packet control function.

12. The method of claim 8 wherein establishing the signaling context includes providing a codec indicating that a circuit bearer is being used.

13. The method of claim 8 wherein establishing the signaling context includes provisioning the endpoint with a null codec to prevent voice packets from being sent via an available packet signaling connection.

14. The method of claim 8 wherein using the signaling context includes using a packet-based session initiation protocol.

15. A telecommunications system for providing a packet-based multimedia service to a mobile station (MS) in a wireless network, wherein the service is defined by a telecommunications standard, and wherein the network does not support a packet quality of service (QoS) mechanism specified by the standard, the system comprising:

- a proxy call session control function (P-CSCF);

- a media gateway connected to the P-CSCF; and

- a plurality of instructions for executing within the network, the instructions for:

- establishing a packet signaling connection between the MS and the P-CSCF;

- establishing a circuit bearer connection between the MS and the media gateway;

- transferring signaling information for the multimedia service between the P-CSCF and the media gateway, and between the P-CSCF and the MS via the packet signaling connection in alignment with the standard; and

- transferring data for the multimedia service between the media gateway and the MS via the circuit bearer connection in response to the signaling information.

16. The system of claim 15 further comprising a serving call session control function (S-CSCF) connected to the P-CSCF and an endpoint, wherein a communication leg between the S-CSCF and the endpoint can be bridged with the circuit bearer connection to form a call session.

17. The system of claim 15 wherein functionality provided by the media gateway and the P-CSCF is combined in a hybrid service gateway (HSG).

18. The system of claim 17 further comprising a plurality of media servers connected to the HSG via the P-CSCF.

19. The system of claim 15 further comprising: a mobile switching center (MSC) positioned between the MS and the media gateway, wherein the circuit bearer connection is established between the MS and MSC; and an intelligent gateway positioned between the MSC and the P-CSCF, wherein the intelligent gateway maps signaling messages between the P-CSCF and the MSC.

20. The system of claim 15 wherein the network is a universal mobile telecommunications system (UMTS) wireless network, and wherein the telecommunications standard is an internet protocol multimedia subsystem (IMS) standard defined within a third generation partnership project (3GPP).

**EVIDENCE APPENDIX**

(None).

**RELATED PROCEEDINGS APPENDIX**

(None).